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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/684,747  
Filing Date: October 14, 2003  
Appellant(s): MAHANY, RONALD L.

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Michael T. Cruz  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the revised appeal brief filed April 30, 2009 appealing from the  
Office action mailed April 16, 2008.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

5,887,020	SMITH ET AL.	3-1999
5,022,046	MORROW, Jr.	6-1991
5,131,019	SHEFFER ET AL.	7-1992

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 41 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 41 (should also include dependent claims 17, 25 and 33 since each of the dependent claims 17, 25 and 33 recites the same claimed subject matter of dependent claim 41, except, depends on different independent claims, namely, claims 11, 19 and

27, respectively) recites that the device is a laptop computer was not described in the specification.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-15, 17-20, 22-23, 25-31, 33-36, 38-39 and 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. (US 5,887,020 "Smith") in view of Morrow Jr. (US 5,022,046 "Morrow").

Regarding claims 11, 19, 27, and 35, Smith discloses a wireless radio transceiver in Figure 1 comprising a dual band transmitter 1 and a dual band receiver 7 in communications with each other and with the hand held device 13. The detailed embodiments of the dual band transmitter 1 and the dual band receiver 7 are shown in the block diagrams of Figures 2 and 3, respectively. Clearly, each of the transmitter 1 and the receiver 7 comprises a mode controller 103 and a mode select switch 104 for selecting either a first type of modulation (spread spectrum) or a second type of modulation (narrowband). See col. 6, lines 11-49; col. 7, line 1-22; and col. 8, lines 23-39 and 50-62.

Regarding claims 14-15, 19-20, 30-31, and 35-36, the transceiver is processing radio communications according to more than one mode and more than one frequency band, for example, a first protocol used for communications in a first frequency range (narrowband frequency band) and a second protocol used for communications in a second frequency range (spread spectrum frequency band). Wherein one of the frequency ranges includes 2.4 GHz within the range 2.4-2.4835 GHz. See abstract.

Smith does not explicitly show, suggest or teach that both the first type of modulation and the second type of modulation are spread spectrum modulations, as recited in each of the independent claims 11, 19, 27 and 35.

Morrow discloses a related radio communication transceiver in Figure 2 comprising a transmission section (14, 16, 22), an antenna switch (18), and a reception section (22, 24, 26, 30) including a narrowband receiver (30). Morrow also teaches that a packet transceiver shown in Figure 1 or Figure 2 is capable of operating in two modes: narrowband and wideband. In the narrowband mode, a sequence generator 22 outputs a non-spreading waveform; i.e., for direct sequence, the "all ones" code is produced, and for frequency hopping, a single frequency is selected. When the radio is operating in the wideband mode, the sequence generator produces a long spreading code sequence which is common to all radios in the network. See col. 6, line 66 to col. 7, line 7.

Therefore, it would have been obvious to one of ordinary skill in the art as taught by Morrow such that Smith's first type of modulation is a narrowband modulation

which is a direct sequence if "all ones" code is produced, and a frequency hopping if a single frequency is selected.

Regarding claims 12-13, 22-23, 28-29, and 38-39, Morrow teaches that the first type of modulation is a direct sequence spread spectrum modulation, and the second type of modulation is a frequency hopping spread spectrum modulation.

Regarding claims 17-18, 25-26, 33-34, and 41-42, as described in Smith's Description of Related Art (col. 1, lines 42-45), it is well known to a skilled person in the art to provide a laptop or wireless communication or a desktop computer for wire communication with a communication transceiver or a hand held size as the hand held device 13 to be held in one hand of a user.

5. Claims 16, 24, 32, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith in view of Morrow as applied to claims 11, 19, 27, and 35 above, and further in view of Sheffer et al. (US 5,131,019 "Sheffer").

Regarding claims 16, 24, 32 and 40 as applied to claims 11, 19, 27, and 35 respectively, although Smith and Morrow do not include a modem transceiver arranged to provide wired communication wherein the controller 103 is arranged to select at least one of the radio transceiver and the modem transceiver.

Sheffer discloses a plurality of radio communication systems shown in Figures 1-2, 4, 6-7, and 9-10. For example, Figure 7 comprises a control interface circuit 60 for selecting one of a digital communicator (wired modem or transceiver) 5 and a cellular radio transceiver 3. See col. 3, lines 7-19; col. 4, lines 48-68; and col. 10, lines 1-26.

Therefore, it would have been obvious to one of ordinary skill in the art to include a wired modem or transceiver in Smith's radio communication system, for instance, within the PBX or PABX 14 in order to have both wireless and wire communications controlled by a controller or processor as taught by Sheffer that is capable of communication, for example, by a hand held device used in a remote area or a desktop computer used at office or home.

**(10) Response to Argument**

**I. REJECTION UNDER 35 U.S.C. 103 (a):**

**Argument (A):**

Regarding independent claim 11, Appellant argues that claim 11 recites, in part, "a wireless radio transceiver arranged to transmit with a first type of spread spectrum modulation and a second type of spread spectrum modulation and to receive with the first type of spread spectrum modulation and the second type of spread spectrum modulation".

According to the Examiner, Smith at FIG. 1 illustrates that "each of the transmitter 1 and the receiver 7 comprises a mode controller 103 and a mode select switch 104 for selecting either a first type of modulation (spread spectrum) or a second type of modulation (narrowband)." Office Action Made Final mailed April 16, 2008 ("Office Action Made Final") at page 4. In addition, the Examiner cites Smith at col. 6, lines 11-49; col. 7, lines 1-22; and col. 8, lines 23-39 and 50-62.

Thus, according to the Examiner's allegation, Smith teaches a transmitter that does not "transmit with a first type of spread spectrum modulation and a second type of spread spectrum modulation". Instead, according to the Examiner's allegation, Smith teaches a transmitter that does transmit with spread spectrum modulation or narrowband modulation.

In fact, the Examiner admits that "Smith does not explicitly show, suggest or teach that both the first type of modulation and the second type of modulation are spread spectrum modulations, as recited in claims 11, 19, 27, and 35." Office Action Made Final at page 4.

As part of the Examiner's *prima facie* case of obviousness, the Examiner alleges that Morrow makes up for the teaching deficiencies of Smith. In particular, the Examiner alleges that "Morrow, Jr. also teaches that a packet transceiver shown in Figure 1 or Figure 2 is capable of operating tow modes: narrowband and wideband. In the narrowband mode, a sequence generator 22 outputs a non-spreading waveform; i.e., for direct sequence, the 'all ones' code is produced, and for frequency hopping, a single frequency is selected. When the radio is operating in the wideband mode, the sequence generator produces a long spreading code sequence which is common to all radios in the network. See col. 6, lines 66 to col. 7, line 7." Office Action Made Final at pages 4-5.

According to the Examiner, "[I]herefore, it would have been obvious to one of ordinary skill in the art as taught by Morrow, Jr. such that Smith's first type of modulation is a narrowband modulation which is a direct sequence if 'all ones' code is

produced, a frequency hopping if a single frequency is selected." Office Action Made Final at page 5.

As alleged by the Examiner and to the extent that the Examiner's allegation is understood by Appellant, it is alleged that both Smith and Morrow describe transmitters that can transmit either by using wideband modulation or by using narrowband modulation.

However, neither Smith nor Morrow teaches a wireless radio transceiver arranged to transmit with a first type of spread spectrum modulation and a second type of spread spectrum modulation as set forth in claim 11.

For example, Smith at FIG. 2 shows that the transmitter can send TRANSMIT INFORMATION through the MODE SELECT SWITCH 104 to either the NARROWBAND MODULATOR 113 or SPREAD SPECTRUM MODULATOR 111.

Since narrowband modulation is different from spread spectrum modulation, as admitted by the Examiner, Smith at FIG. 2 does not appear to meet "a wireless radio transceiver arranged to transmit with a first type of spread spectrum modulation and a second type of spread spectrum modulation" as set forth in claim 11.

Although offered by the Examiner to overcome the teaching deficiencies of Smith, Morrow, as alleged, does not make up for the teaching deficiencies of Smith. For example, as cited by the Examiner, with respect to Morrow at FIG. 1, "[t]he

transceiver is capable of operating in two modes: narrowband and wideband." Morrow at col. 6, line 67 to col. 1, line 1.

Since narrowband modulation is different from spread spectrum modulation, Morrow, as alleged by the Examiner, does not appear to meet "**a wireless radio transceiver arranged to transmit with a first type of spread spectrum modulation and a second type of spread spectrum modulation**" as set forth in claim 11.

Appellant respectfully draws the attention of the Board to the Examiner's *prima facie* case in which the Examiner describes Smith and Morrow as teaching the same concept. In particular as alleged by the Examiner, both Smith and Morrow teach a transmitter that can transmit either in narrowband or in wideband.

Thus, neither Smith nor Morrow, as alleged by the Examiner and to the extent that the Examiner's allegation is understood by Appellant, teaches "**a wireless radio transceiver arranged to transmit with a first type of spread spectrum modulation and a second type of spread spectrum modulation**" as set forth in claim 11.

However, taking the Examiner's alleged *prima facie* case of obviousness on its face, since both Smith and Morrow are alleged to teach a transmitter that can transmit either in narrowband or in wideband, then neither Smith nor Morrow teaches "**a wireless radio transceiver arranged to transmit with a first type of spread spectrum modulation and a second type of spread spectrum modulation**" as set forth in claim 11.

In particular, the Examiner concludes "[t]herefore, it would have been obvious to one of ordinary skill in the art as taught by Morrow, Jr. such that Smith's first type of

modulation is a narrowband modulation which is a direct sequence if 'all ones' code is produced, a frequency hopping if a single frequency is selected."

Even in the Examiner's conclusion, the Examiner still uses the narrowband modulation of Smith. If the modification of Smith still creates a narrowband modulation, then the modification of Smith does not meet at least the following elements "a wireless radio transceiver arranged to transmit with a first type of spread spectrum modulation and a second type of spread spectrum modulation" as set forth in claim 11.

It is possible that the Examiner might not appreciate the ramifications of an all ones' code. For example and merely for demonstration without affecting the interpretation and/or scope of any claim, multiplying a signal by ones merely reproduces the signal. There is no spreading. Therefore, it is a narrowband signal.

It is also possible that the Examiner might not appreciate the ramifications of using a single frequency. Using a single frequency is a narrowband signal. On the other hand, using frequency hopping, which is different from using a single frequency, is a spread spectrum technique.

Since the Examiner's *prima facie* case of obviousness does not teach each and every element as set forth in claim 1, the obviousness rejection cannot be maintained.

In addition, it is respectfully submitted that Morrow teaches away from Smith. Morrow teaches a number of advantages for its allegedly inventive protocol. At least seven (7) of these advantages are listed (a) to (g) in Morrow at col. 6, lines 20-31. Morrow states that "[t]hese characteristics are achieved by assigning each user of the packet network identical spreading sequences". Morrow at col. 6, lines 32-34.

On the other hand, Smith teaches that "[w]hen using spread-spectrum techniques for wireless communication, it may be necessary to avoid or minimize interference with other users of the electromagnetic spectrum .... Accordingly, it would be advantageous to avoid or minimize interference with microwave and cellular communication users."

It is respectfully submitted that, if each user of the network uses the identical spreading sequence as taught in Morrow, then this would maximize (instead of minimize) interference with microwave and cellular communication users. For example, two users sending out transmissions with the same spreading sequence would cause maximum (instead of minimum) interference.

It is respectfully submitted that, since the teachings of Morrow and Smith teach away from each other, Morrow and Smith should not be combined. See, e.g., M.P.E.P. §2145(X)(D)(2) ("It is improper to combine references where the references teach away from their combination.").

It is therefore respectfully requested that the obviousness rejection be reversed with respect to claim 11 and its rejected dependent claims (i.e., claims 12-15, 17 and 18).

**Response (A):**

Appellant appears argue that the "narrowband" modulation used in the narrowband mode of both Smith's transceiver and Morrow's transceiver is not a type of spread spectrum modulation because Morrow teaches that the sequence generator 22 of the transceiver outputs "a non-spreading waveform" and agrees that the "wideband"

modulation is a type of spread spectrum modulation, such as frequency hopping spread spectrum modulation.

The examiner respectfully disagrees with Appellant's interpretation that because the sequence generator 22 shown in Figure 1 or Figure 2 of Morrow's transceiver outputs "a non-spreading waveform". Therefore, when a narrowband mode is selected, the transmitter and/or the receiver do not arranged to transmit and/or receiver spread spectrum modulation.

Morrow teaches that "a packet transceiver shown in Figure 1 or Figure 2 is capable of operating two modes: narrowband and wideband. In the narrowband mode, a sequence generator 22 outputs a non-spreading waveform; i.e., for direct sequence, the "all ones" code is produced, and for frequency hopping, a single frequency is selected. When the radio is operating in the wideband mode, the sequence generator produces a long spreading code sequence which is common to all radios in the network. See col. 6, lines 66 to col. 7, line 7.

Although the sequence generator outputs "a non-spreading waveform", as taught by Morrow, for example, shown in the transceiver of Figure 2, one of ordinary skill person in the art would appreciate that the combination of the sequence generator 22 together with other block elements in the transmitter (i.e., 14, 16, 18, 20) and/or the narrowband receiver 30 is capable of transmitting and/or receiving spread spectrum modulation. For instance, when the sequence generator 22 outputs "all ones" code to the modulator 14, the modulator 14 modulates the signals from the processor 12 with

the all ones code to generate direct sequence spread spectrum modulation for transmission, for example, by the antenna 20 or reception by the narrowband receiver 30 through the RF amplifier 16 and the antenna switch 18, and when a "single frequency" code is generated by the sequence generator 22 to the modulator 14, the modulator 14 modulates the signals from the processor 12 with the single frequency code to generate frequency hopping sequence spread spectrum modulation for transmission by the antenna 20 or reception by the narrowband receiver 30 through the RF amplifier 16 and the antenna switch 18.

Further, although Morrow teaches a number more (7) of advantages for its allegedly inventive protocol than Smith, it does not mean Morrow teaches away from Smith. It is noted that the features upon which Appellant relies are not recited in the rejected claim 11, i.e., Smith teaches that "[w]hen using spread-spectrum techniques for wireless communication, it may be necessary to avoid or minimize interference with other users of the electromagnetic spectrum .... Accordingly, it would be advantageous to avoid or minimize interference with microwave and cellular communication users". However, if each user of the network uses the identical spreading sequence as taught in Morrow, then this would maximize (instead of minimize) interference with microwave and cellular communication users. For example, two users sending out transmissions with the same spreading sequence would cause maximum (instead of minimum) interference). Although claim 11 is interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Therefore, the rejection of independent claim 11, including the dependent claims 12-15, 17 and 18 are being unpatentable over Smith in view of Morrow rejected under 35 U.S.C. 103(a).

**Argument (B):**

Regarding claims 19, 20, 22, 23, 25-31, 33-36, 38, 39, 40 and 41, Appellant further argues that independent claim 19 recites "wherein the radio transceiver is arranged to transmit using a first type of spread spectrum modulation and a second type of spread spectrum modulation".

Independent claim 27 recites "a wireless radio transceiver arranged to transmit with a first type of spread spectrum modulation and a second type of spread spectrum modulation and to receive with the first type of spread spectrum modulation and the second type of spread spectrum modulation".

Independent claim 35 recites "wherein the radio transceiver is arranged to transmit using a first type of spread spectrum modulation and a second type of spread spectrum modulation".

Accordingly, the same or similar arguments, if applicable, made with respect to independent claim 11 can also be made with respect to independent claims 19, 27 and 35.

For at least the above reasons, it is therefore respectfully requested that the obviousness rejection be reversed with respect to independent claims 19, 27 and 35

and their rejected dependent claims (i.e., claims 20, 22, 23, 25, 26, 28-31, 33, 34, 36, 38, 39, 41 and 42).

**Response (B):**

Since independent claims 19, 27 and 35 recite the same or similar claimed subject matter as recited in independent claim 11, and the response to independent claim 11 has been discussed above. For at least the above reasons discussed in independent claim 11, therefore the rejection of independent claims 19, 27 and 39, including the dependent claims 20, 22, 23, 25, 26, 28-31, 33, 34, 36, 38, 39, 41 and 42 are also being unpatentable over Smith in view of Morrow rejected under 35 U.S.C. 103(a).

**Argument (C):**

Regarding claims 13, 23, 29 and 39, Appellant argues that dependent claims 13, 23, 29 and 39 depend indirectly from independent claims 11, 19, 27 and 35, respectively.

Accordingly, the arguments made with respect to independent claims 11, 19, 27 and 35 are also applicable to claims 13, 23, 29 and 39.

For at least the above reasons, it is therefore respectfully requested that the obviousness rejection be reversed with respect dependent claims 13, 23, 29 and 39.

In addition, dependent claims 13, 23, 29 and 39 depend from claims 12, 22, 28 and 38. Thus, since dependent claims include all the elements of their independent

claims and any intervening claims, dependent claims 13, 23, 29 and 39 state that the second type of spread spectrum modulation is frequency hopping spread spectrum modulation and, from intervening claims, the first type of spread spectrum modulation is direct sequence spread spectrum modulation.

With respect to the Examiner's alleged *prima facie* case of obviousness, as best understood by Appellant, the Examiner is alleging (from the teaching in Morrow) a direct sequence if "all ones" code is produced or a frequency hopping if a single frequency is selected. See Office Action Made Final at pages 3-5.

However, the claim language recites frequency hopping *spread spectrum modulation* or direct sequence *spread spectrum modulation*. The problem with the special case of a single frequency or using "all ones" code is that this is not spread spectrum modulation. First, single frequency transmissions are narrowband. Second, there is no spreading if the code used is "all ones".

Even Morrow supports this interpretation by noting that "[i]n the *narrowband mode*, a sequence generator 22 outputs a *non-spreading waveform*; i.e., for direct--sequence, the 'all ones' code is produced, and for frequency-hopping, a single frequency is selected." Morrow at col. 7, lines 1-4 (emphasis added).

It is possible that the Examiner might not appreciate the ramifications of an 'all ones' code. For example and merely for demonstration without affecting the interpretation and/or scope of any claim, multiplying a signal by ones merely reproduces the signal. There is no spreading. Therefore, it is a narrowband signal.

It is also possible that the Examiner might not appreciate the ramification of using a single frequency. Using a single frequency is a narrowband signal. On the other hand, using frequency hopping, which is different from using a single frequency, is a spread spectrum technique.

For at least the above reasons, it is therefore respectfully requested that the obviousness rejection be reversed with respect dependent claims 13, 23, 29 and 39.

**Response (C):**

Since dependent claims 13, 23, 29 and 39 depend indirectly from independent claims 11, 19, 27 and 35, respectively, and the response to independent claim 11 has been fully address that when Morrow's sequence generator 22 outputs "all ones" code to the modulator 14, the modulator 14 modulates the signals from the processor 12 with the all ones code to generate direct sequence spread spectrum modulation for transmission by the antenna 20 or reception by the narrowband receiver 30 through the RF amplifier 16 and the antenna switch 18, and when a "single frequency" code is generated by the sequence generator 22 to the modulator 14, the modulator 14 modulates the signals from the processor 12 with the single frequency code to generate frequency hopping sequence spread spectrum modulation for transmission by the antenna 20 or reception by the narrowband receiver 30 through the RF amplifier 16 and the antenna switch 18.

For at least the above reasons discussed in independent claims 11, 19, 27 and 35, therefore the rejection of independent claims 11, 19, 27 and 39, including the

dependent claims 13, 23, 29 and 39 are also being unpatentable over Smith in view of Morrow rejected under 35 U.S.C. 103(a).

**Argument (D):**

Regarding claims 17, 18, 25, 26, 33, 34, 41 and 42, Appellant argues that dependent claims 17, 18, 25, 26, 33, 34, 41 and 42 depend from independent claims 11, 19, 27 and 35, respectively. Accordingly, the arguments made with respect to independent claims 11, 19, 27 and 35 are also applicable to claims 17, 18, 25, 26, 33, 34, 41 and 42.

For at least the above reasons, it is therefore respectfully requested that the obviousness rejection be reversed with respect dependent claims 17, 18, 25, 26, 33, 34, 41 and 42.

In addition, with respect to claims 17, 18, 25, 26, 33, 34, 41 and 42, the Examiner alleges, without any documentary proof, that "it is well known to a skilled person in the art to provide a laptop or wireless communication or a desktop computer for wire communication with a communication transceiver or a hand held size as the hand held device 13 to be held in one hand or a user".

Appellant respectfully challenges what is allegedly well known. It is believed that the Examiner has considered a "laptop computer" as set forth in claims 17, 25, 33 and 41 *in a vacuum* instead of considering the "laptop computer" *in the context* of the elements as set forth in independent claims 11, 19, 27 and 35, respectively, in

compliance with the statutory requirements of a *prima facie* case of obvious under 35 U.S.C. 103(a).

For example, in combining dependent claim 17 and its independent claim 11, it is not well known for a device to include a laptop computer in which the device includes a wireless radio transceiver arranged to transmit with a first type of spread spectrum modulation and a second type of spread spectrum modulation and to receive with the first type of spread spectrum modulation and the second type of spread spectrum modulation. In fact, in view of the arguments and rebuttal evidence presented with respect to claim 11, it is clear that it is not obvious for a device to include a wireless radio transceiver arranged to transmit with a first type of spread spectrum modulation and a second type of spread spectrum modulation. Therefore, it is not obvious that said device, which includes said wireless radio transceiver arranged to transmit with said first type of spread spectrum modulation and said second type of spread modulation, includes a laptop computer.

In other words, Appellant respectfully submits that, *in the context*, for example, of elements as set forth in independent claim 11, the elements as set forth in claim 17 are not obvious or well known.

In fact, for at least the reasons as set forth above, the Examiner's *prima facie* case of obviousness cannot be maintained. Accordingly, since Smith in view of Morrow, as alleged by the Examiner, does not teach each and every element as set forth in

claim 11, the elements as set forth in claim 17 *in the context* of the elements as set forth in claim 11 are not and cannot be obvious or well known.

The same or similar arguments that were made with respect to claim 17 are also made, if applicable, with respect to claims 18, 25, 26, 33, 34, 41 and 42.

In addition, "assertions of technical facts in the areas of esoteric technology or specific knowledge of the prior art must always be supported by citation to some reference work recognized as standard in the pertinent art." M.P.E.P. § 2144.03(A). It is respectfully submitted that spread spectrum technologies are an area of esoteric technology.

It is respectfully submitted that the Examiner is making naked assertions of particular technical facts in an area of esoteric technology (e.g., *in the context* of spread spectrum modulation devices), which is improper without providing documentary evidence. See, e.g., M.P.E.P. § 2144.03(A) ("assertions of technical facts in the areas of esoteric technology or specific knowledge of the prior art must always be supported by citation to some reference work recognized as standard in the pertinent art").

It is therefore respectfully requested that the Board direct the Examiner to support the assertion of technical facts in the area of an esoteric technology (e.g., spread spectrum technologies) with some reference work recognized as standard in the pertinent art.

For at least the above reasons, it is therefore respectfully requested that the obviousness rejection be reversed with respect dependent claims 17, 18, 25, 26, 33, 34, 41 and 42.

It is also respectfully requested that the Board direct the Examiner to produce documentary evidence in support of the obviousness rejection of claims 17, 18, 25, 26, 33, 34, 41 and 42 as set forth in M.P.E.P. § 2144.03, or to provide an affidavit or declaration setting forth specific factual statements and explanation to support the finding if the Examiner is relying on personal knowledge in compliance with 37 C.F.R. § 1.104(d)(2).

Lastly, if documentary evidence is produced by the Examiner, M.P.E.P. § 2144.03(A) appears to imply that the Examiner must cite not merely a reference work, but a reference work that is recognized as a *standard* in the pertinent art.

**Response (D):**

Appellant appears argue that the device comprises a laptop computer is not well known to an average skilled person in the art and assertions of technical facts in the areas of esoteric technology or specific knowledge of the prior art must always be supported by citation to some reference work recognized as standard in the pertinent art. M.P.E.P. § 2144.03(A). Independent claims 11 and 19 recite "a portable data processing device" and independent claims 27 and 35 recite "circuitry suitable for use in a portable data processing device". An average skilled person in the computer art knows that a portable data processing device and/or circuitry suitable for use in a

portable data processing device are just mall parts which can be used in a computer or a laptop computer, and a computer or a laptop computer is capable of communication with other computers and/or laptop computers using either wire or wireless connections.

Therefore, someone design a piece of device or circuitry, such as the portable data processing device recited in independent claims 11, 19, 27 and 35 is well known to an average skilled person in the computer art to implement a device or circuitry, such as those used in Smith' transceiver and/or Morrow's transceiver as one of the parts into a computer or a laptop computer because the common facts used in computers or laptop computers of the prior art does not need to be supported by citation to some reference work recognized as standard in the pertinent art as required by M.P.E.P. § 2144.03(A).

Appellant note that claims 17, 25, 33 and 41 contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. For example, each of claims 17, 25, 33 and 41 recite that the device or circuitry is a laptop computer is not described in the specification, shown in the drawings, and recited in the original claims since this application is a continuation of application No. 08/973,195, which includes claims 1-10 only, now cancelled. Therefore, claims 11-42 including claim 17, 25, 33 and 41 are not considered as original claims.

**Argument (E):**

Regarding claims 16, 24, 32 and 40, Appellant argues that claims 16, 24, 32 and 40 depend from independent claims 11, 19, 27 and 35, respectively. Accordingly, the

arguments made with respect to independent claims 11, 19, 27 and 35 are also applicable to dependent claims 16, 24, 32 and 40.

For at least the above reasons, it is therefore respectfully requested that the obviousness rejection be reversed with respect dependent claims 16, 24, 32 and 40.

**Response (E):**

Since dependent claims 16, 24, 32 and 40 depend from independent claims 11, 19, 27 and 35, respectively, and the response to independent claim 11 has been discussed in claim 11 above.

For at least the above reasons discussed in independent claims 11, 19, 27 and 35, therefore the rejection of independent claims 11, 19, 27 and 39, including the dependent claims 16, 24, 32 and 40 are also being unpatentable over Smith in view of Morrow and further in view of Sheffer rejected under 35 U.S.C. 103(a).

**II REJECTION UNDER 35 U.S.C. 112, FIRST PARAGRAPH**

**Argument:**

Regarding claim 41 rejected under 35 U.S.C. § 112, first paragraph, Appellant argues that claim 41 recites "The circuitry of claim 35 wherein the device is a laptop computer".

Claim 41 depends from claim 35 which refers to "Circuitry suitable for use in a portable data processing device". Thus, claim 41 clarifies claim 35 such that it is now

circuitry suitable for use in a portable data processing device, wherein the device is a laptop computer.

The Examiner is essentially arguing that one of ordinary skill in the art can make, without undue experimentation, circuitry suitable for use in a portable data processing device, but that one of ordinary skill in the art could not make, without undue experimentation, circuitry suitable for use in a portable data processing device, wherein the device is a laptop computer.

Appellant respectfully submits, for the Board's approval, that if one of ordinary skill in the art can make, without undue experimentation, circuitry suitable for use in a portable data processing device, then one of ordinary skill in the art could also make, without undue experimentation, circuitry suitable for use in a portable data processing device, wherein the device is a laptop computer.

In addition, it is respectfully submitted that the Examiner has possibly taken a logically inconsistent position with respect to the rejection of claim 41 under 35 U.S.C. 112, first paragraph.

**Response:**

Appellant's argument appears provide contradiction statements respect with the arguments regarding claims 17, 18, 25, 26, 33, 34, 41 and 42 in argument (D), which argues that the examiner alleges, without any documentary proof, that "it is well known to a skilled person in the art to provide a laptop or wireless communication or a desktop

computer for wire communication with a communication transceiver or a hand held size as the hand held device 13 to be held in one hand or a user."

Claim 41 (should includes dependent claims 17, 25 and 33 as well because each of the dependent claims 17, 25 and 33 recites the same or similar claim subject matter as recited in claim 41, except, depends from independent claims 11, 19 and 27, respectively) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. For example, each of claims 17, 25, 33 and 41 recites that the device or circuitry is a laptop computer is not described in the specification, shown in the drawings, and recited in the original claims since this application is a continuation of application No. 08/973,195, which includes claims 1-10 only, now cancelled. Therefore, claims 11-42 including claim 17, 25, 33 and 41 are not considered as original claims.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/YOUNG T. TSE/

Primary Examiner, Art Unit 2611

Conferees:

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